

Applicants: William C. Olson and Paul J. Maddon
Serial No.: 09/594,983
Filed June 15, 2000
Page 3

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-97. (Canceled)

98. (Currently amended) A monoclonal antibody ~~or a fragment thereof comprising complementarity determining regions (CDRs), wherein said CDRs bind to an epitope of chemokine receptor 5 (CCR5) and said epitope comprises amino acid residues in (a) an N-terminus of CCR5, (b) one of three extracellular loop regions of CCR5, or (c) a combination thereof, and wherein the antibody is antibody PA8 (ATCC Accession No. HB-12605), antibody PA9 (ATCC Accession No. HB-12606), antibody PA10 (ATCC Accession No. HB-12607), antibody PA11 (ATCC Accession No. HB-12608), antibody PA12 (ATCC Accession No. HB-12609) or antibody designated PA14 produced by the hybridoma cell line designated PA14 (ATCC Accession No. HB-12610) or a fragment thereof which binds to an epitope of chemokine receptor 5 (CCR5), which epitope comprises a combination of amino acid residues in (a) the N-terminus of CCR5, and (b) the second extracellular loop of CCR5.~~

99. (Currently amended) A hybridoma cell line designated PA14 (ATCC Accession No. HB-12610) producing which produces a monoclonal antibody designated PA14. comprising complementarity determining regions (CDRs), wherein said CDRs bind to an epitope of chemokine receptor 5 (CCR5)

Applicants: William C. Olson and Paul J. Maddon
Serial No.: 09/594,983
Filed June 15, 2000
Page 4

~~and said epitope comprises amino acid residues in (a) an N-terminus of CCR5, (b) one of three extracellular loop regions of CCR5, or (c) a combination thereof, and wherein the antibody or fragment thereof binds to the same epitope as is antibody PA8 (ATCC Accession No. HB-12605), antibody PA9 (ATCC Accession No. HB-12606), antibody PA10 (ATCC Accession No. HB-12607), antibody PA11 (ATCC Accession No. HB-12608), antibody PA12 (ATCC Accession No. HB-12609) or antibody PA14 (ATCC Accession No. HB-12610).~~

100. (Currently amended) A monoclonal antibody or a fragment thereof, wherein the antibody or the fragment thereof binds to the same epitope as monoclonal antibody PA14 produced by the hybridoma cell line designated PA14 (ATCC Accession No. HB-12610).

101. (Currently amended) A monoclonal antibody or a fragment thereof ~~comprising~~ consisting of complementarity determining regions (CDRs) wherein said CDRs are derived from a hybridoma ~~having~~ designated PA14 (ATCC Accession No. HB-12610) ~~(PA14)~~.

102. (Currently amended) The monoclonal antibody or fragment thereof according to any ~~one~~ of claims 98, 100 ~~and~~ or 101, wherein the antibody or fragment thereof is humanized.

103. (Previously presented) The monoclonal antibody according to claim 102, wherein the antibody comprises a framework from a human immunoglobulin molecule.

104. (Previously presented) The monoclonal antibody according

Applicants: William C. Olson and Paul J. Maddon
Serial No.: 09/594,983
Filed June 15, 2000
Page 5

to claim 103, wherein the human immunoglobulin molecule is selected from the group consisting of IgG1, IgG2, IgG3, IgG4, IgA and IgM.

105-116. (Canceled)

117. (Previously presented) The monoclonal antibody or fragment thereof according to claim 100, wherein the antibody is a humanized antibody.

118. (Previously presented) The monoclonal antibody or fragment thereof according to claim 101, wherein the antibody is a humanized antibody.

119. (Previously presented) The monoclonal antibody or fragment thereof according to claim 117, wherein the antibody comprises a framework from a human IgG2 immunoglobulin molecule.

120. (Previously presented) The monoclonal antibody or fragment thereof according to claim 117, wherein the antibody comprises a framework from a human IgG4 immunoglobulin molecule.

121. (Previously presented) The monoclonal antibody or fragment thereof according to claim 118, wherein the antibody comprises a framework from a human IgG2 immunoglobulin molecule.

122. (Previously presented) The monoclonal antibody or fragment thereof according to claim 118, wherein the antibody comprises a framework from a human IgG4

Applicants: William C. Olson and Paul J. Maddon
Serial No.: 09/594,983
Filed June 15, 2000
Page 6

immunoglobulin molecule.

123. (Previously presented) The monoclonal antibody or fragment thereof according to claim 100, wherein the antibody is a chimeric antibody.
124. (Previously presented) The monoclonal antibody or fragment thereof according to claim 101, wherein the antibody is a chimeric antibody.
125. (Previously presented) The monoclonal antibody or fragment thereof according to claim 123, wherein the antibody comprises a framework from a human IgG2 immunoglobulin molecule.
126. (Previously presented) The monoclonal antibody or fragment thereof according to claim 123, wherein the antibody comprises a framework from a human IgG4 immunoglobulin molecule.
127. (Previously presented) The monoclonal antibody or fragment thereof according to claim 124, wherein the antibody comprises a framework from a human IgG2 immunoglobulin molecule.
128. (Previously presented) The monoclonal antibody or fragment thereof according to claim 124, wherein the antibody comprises a framework from a human IgG4 immunoglobulin molecule.
129. (Previously presented) The monoclonal antibody or fragment thereof according to claim 100, wherein the

Applicants: William C. Olson and Paul J. Maddon
Serial No.: 09/594,983
Filed June 15, 2000
Page 7

antibody fragment is a monovalent fragment of an antibody.

130. (Previously presented) The monoclonal antibody or fragment thereof according to claim 101, wherein the antibody fragment is a monovalent fragment of an antibody.

131. (Previously presented) The monovalent antibody or fragment thereof according to claim 129, wherein the antibody comprises a framework from a human IgG2 immunoglobulin molecule.

132. (Previously presented) The monovalent antibody or fragment thereof according to claim 129, wherein the antibody comprises a framework from a human IgG4 immunoglobulin molecule.

133. (Previously presented) The monovalent antibody or fragment thereof according to claim 130, wherein the antibody comprises a framework from a human IgG2 immunoglobulin molecule.

134. (Previously presented) The monovalent antibody or fragment thereof according to claim 130, wherein the antibody comprises a framework from a human IgG4 immunoglobulin molecule.